

REMARKS

Claims 1, 2, and 4-6 are pending in this application. By this Amendment, the specification is amended and claims 1, 4 and 5 are amended. The Amendments add no new matter.

Applicants gratefully acknowledge the courtesies extended to Applicants' representative by Examiner Lee in the June 7, 2006 personal interview. The points discussed are incorporated into the following remarks.

I. Objections

The Office Action asserts that in paragraph 47, line 9, and paragraph 48, second line, "Figures 2 and 3" should be rewritten as "Figures 1 and 2" for a proper characterization. Figures 1-3 relate to a first embodiment of the invention. As disclosed in the brief description of the drawings, Fig. 2 is a perspective view of the RF module 20 of the embodiment shown in Fig. 1, and Fig. 3 is a plan view of the RF module 20 of the embodiment shown in Fig. 1. As disclosed in brief description of the drawings, Figs. 2 and 3 illustrate the same element of the embodiment.

The specification has been amended at paragraph 46 to disclose that like features appearing in different drawing figures are denoted by like reference numerals and may not be described in detail for all drawing figures in which they appear, consistent with the Examiner's suggestion.

The Office Action asserts that the drawings do not show every feature of the invention specified in the claims. Specifically, the Office Action indicates that the first waveguide having the line shaped conductor and ground electrode with the line conductor directly connected to one of the ground electrodes of the second waveguide must be shown. Figs. 21A and 21D depict perspective illustrations of TEM waveguides (first waveguide). An end of first waveguide would inherently comprise the line shaped conductor and ground electrode.

An end of the TEM waveguide (first waveguide) is shown connected to a ground electrode of the second waveguide in Fig. 1.

Accordingly, Applicants respectfully request withdrawal of the objections.

II. Rejections under 35 U.S.C. §112, first paragraph

The Office Action asserts that in claim 1, the first waveguide having a ground electrode and a line shaped conductor portion does not find support in the original disclosure, and thus has been treated as new matter. Applicants respectfully traverse this rejection.

As discussed in the personal interview, the first waveguide of claim 1 is a TEM waveguide, as is known to those skilled in the art. A TEM first waveguide is described in at least paragraphs 6, 47, and 50. Examples of a micro strip and coaxial waveguide are depicted in Figs. 21A and 21B, respectively. Such a TEM waveguide, as is known in the art, inherently comprises a ground electrode and a line shaped conductor portion. Thus, this feature of amended claims 1, 4 and 5 introduces no new matter. Withdrawal of this rejection of claims 1, 4 and 5 is hereby respectfully requested.

The Office Action asserts, that, in claims 1, 4 and 5, the feature of the line shaped conductor portion being conductively connected to one of the ground electrodes of the second waveguide does not find support in the original disclosure, and thus has been treated as new matter. This rejection is respectfully traversed.

As discussed in the personal interview, an end of the first waveguide is connected to the one of the ground electrodes of the second waveguide. The line shaped conductor portion and the ground conductor of the first waveguide are short circuited to each other where the end of the first waveguide is conductively connected to the ground electrode of the second waveguide. Fig. 1 depicts an end of the first waveguide connected to a ground electrode of the second waveguide. The specification discloses in paragraph 50, lines 5-7, that the end portion of the first waveguide is made conductive. Paragraph 67 notes that according to the

embodiment, the first waveguide is conductively connected to the ground electrode of the second waveguide, directly or indirectly. Consequently, without changing the connection position, the magnetic fields can be coupled with maximum efficiency in a wide frequency range. In direct contrast, paragraph 68 and Figs. 10A and 10B disclose an open-ended connection wherein the line shaped conductor portion and the ground conductor of the TEM waveguide are not conductively connected, as is known in the art. In such an open-ended connection, the magnetic fields are not coupled to achieve maximum efficiency over a wide frequency range.

The Office Action asserts that in claim 1, the recitations "from an upper side or lower side of the stacking direction side" and "in a plane containing the conducting window" are vague in meaning. Applicants respectively traverse this rejection.

It is Applicants' position that the features recited are necessary to properly claim the invention.

The Office Action notes that the recitation "one of the ground electrodes of the second waveguide having the connecting window" appears to be redundant or otherwise an unnecessary recitation since of the location of the "window" appears to have been defined at earlier locations in the claim. It is Applicants' position that, because multiple ground electrodes of the second waveguide are disclosed, recitation of this feature is necessary to properly claim the invention. Thus, this rejection is respectfully traversed.

The Office Action notes that in claims 4 and 5, it is unclear whether the "line pattern of the first waveguide" being "conductively connected to the ground electrode between neighboring propagation regions of the second waveguide" is properly dependent from limitation recited in claim 1, where the "line pattern" is connected to "one of the ground electrodes of the second waveguide." Claims 1, 4 and 5 have been amended to obviate this rejection. Withdrawal of this rejection is respectfully requested.

III. Conclusion

In view of the foregoing amendments and arguments, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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